1.0 INTRODUCTION

1.1 Narrative

It started as a meandering game trail. In general, it followed a low divide between the headwaters of the Christina River and Lions Creek. Do you credit the rabbits or the deer for the initial design of U.S. Route 40 (Route 40) between State Route (S.R.) 896 and S.R. 1, New Castle County, Delaware? Whichever animals first connected the berry patches and the oak groves, weaving around the briers and vines of tree falls and avoiding the mucky bogs, they laid the groundwork for what was to become a Native American trail.

The Native Americans throughout the Middle Atlantic region utilized and improved select game trails. Unlike the modern paradigm under which highway construction spurs activity and development, it was the actual use of an area by Native American groups which improved the game trails into footpaths. If a game trail was used only a few times over the thousands of years of prehistory, it would not have become a footpath or "Indian trail." If a game trail provided a linkage between, for example, coastal camps/villages and the jasper quarries of Iron Mountain, it would quickly become an established Native American footpath, perhaps named the White DoePath in remembrance of an albino deer seen in the area.

Just as the Native Americans improved upon game trails, the early Euro-American settlers of Delaware followed Native American trails. As the settlers learned the country and its resources, they recognized the most important (from the Euro-American perspective) trails and developed them into horse paths, then wagon roads, and then pikes or expressways. Access to oak stands, a productive berry patch, a shellfish bed, a jasper quarry, or a spiritually significant location would not necessarily have been important to the settlers. Instead, they desired good agricultural land with access to markets and support industries. The Euro-American agricultural system presented a dilemma, requiring large tracts of land but also requiring access to capital-intensive processing facilities (e.g., mills) and urban markets. Before a settler chose a location along the former White Doe Path, he had to know that his corn and wheat could be processed, and that there was a market at hand for his produce and orchard products. Proximity to Newark, measured as straight-line distance was immaterial if he "can't get there from here."

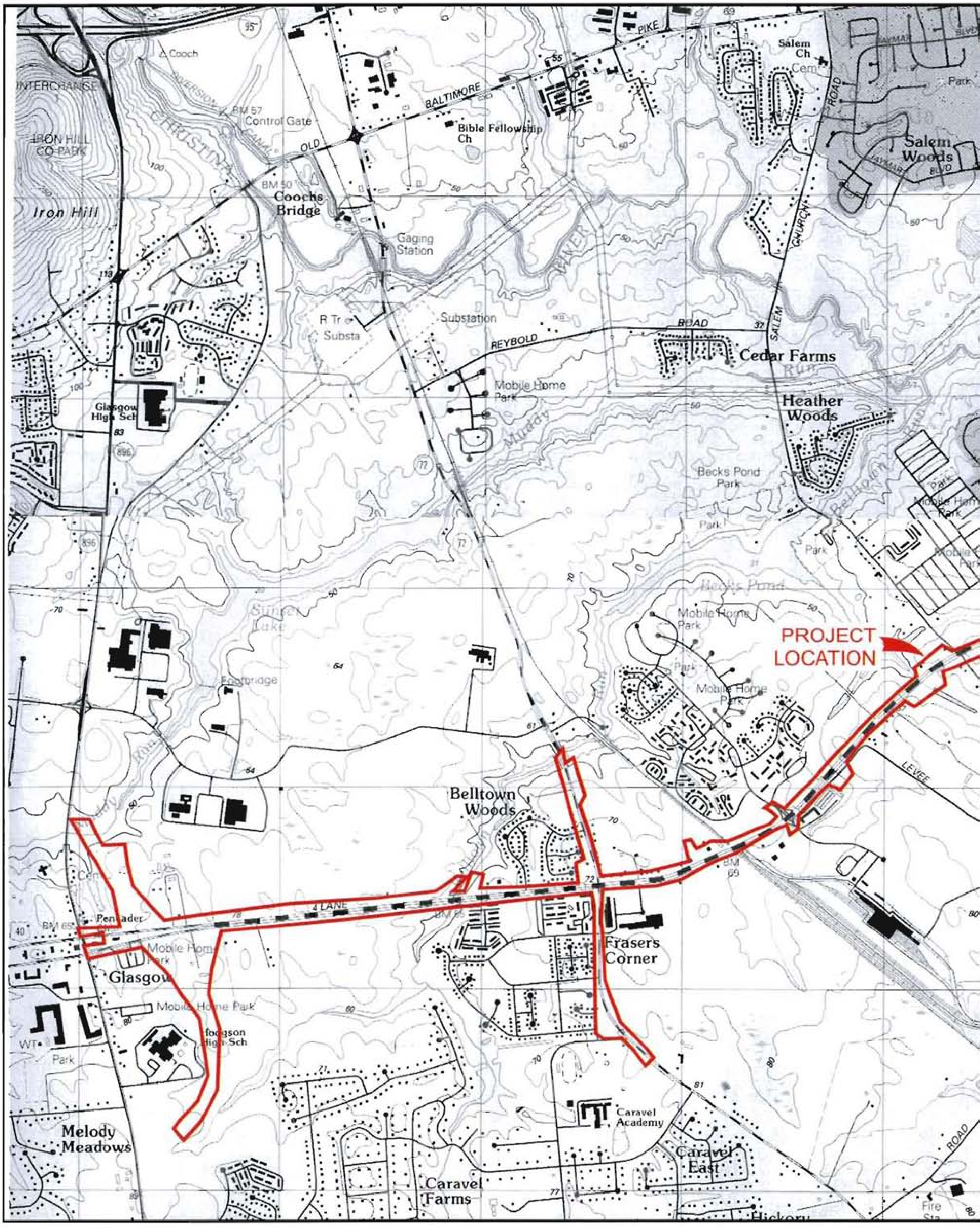
The wide-scale availability and use of automobiles required another set of modifications to the study corridor. Automobiles like long, straight, level, smooth roads. The curves and tight

intersections that were tenable in a wagon or buggy suddenly became unacceptable. The settlers' road was straightened and widened and eventually paved. Travel time to Newark, New Castle, Wilmington, urban markets, and employment decreased significantly. In addition, the automobile allowed flexible private travel, and the concept of an automobile vacation took hold. The new road brought roadside development, initially in the form of support businesses (gas stations, travel camps, motels) and later in the form of residences. A location that was once a half-day wagon ride from Newark became a 20 minute commute, and the rural farmland of the study corridor increasingly became suburbanized. The road was improved to four lanes in the 1930s, and the past 30 years have seen a tremendous growth in the retail and residential development fronting on Route 40. To the archaeologist, this development had the effect of wiping clean huge portions of the archaeological record. The townhouse developer begins by completely stripping his property to subsoil. He levels his ground and builds a berm to hide Route 40 from the people wanting so badly to live along Route 40. His townhouses and parking lots occupy almost all of his property, and he must bring in topsoil to create his sparse landscaping. If a Native American of the Woodland I period had camped here for a few days, all evidence is gone. If an early settler had built his house and outbuildings at this location, no archaeological signs will remain. If a 1920s bungalow had stood here, it was razed to make room for more profitable use of the property.

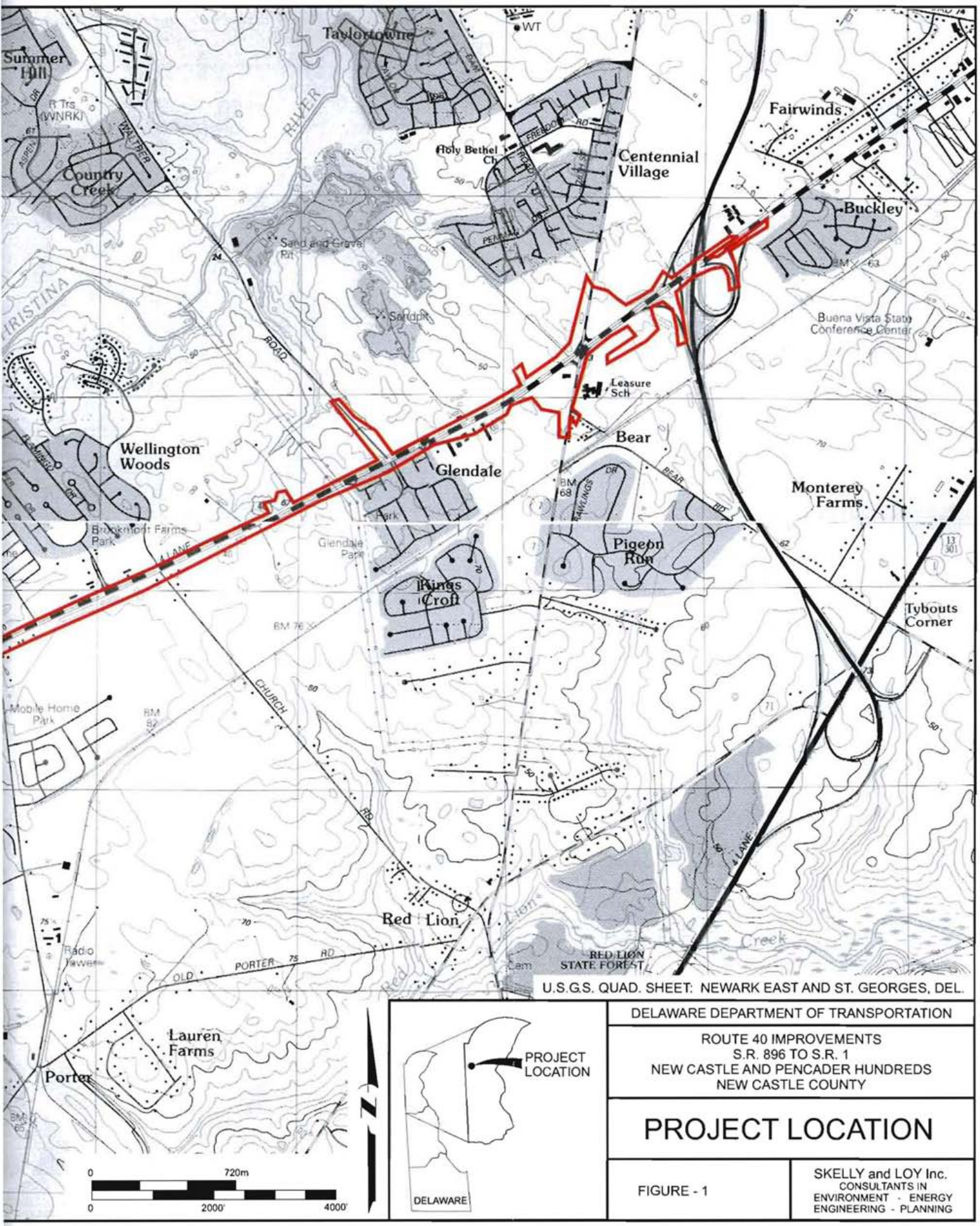
By 2002, much has happened on the Route 40 corridor, between S.R. 1 and S.R. 896 in Pencader and New Castle hundreds of New Castle County (Figure 1). There have been many improvements from the rabbit path to the four-lane highway, and the data are clear that the four-lane will soon be over-stressed. Accordingly, The State of Delaware Department of Transportation (DelDOT) proposes to add an additional lane in each direction, improved turn lanes, and improved intersections at S.R. 896 and S.R. 72. The use of federal-aid highway funds on the project dictates that DelDOT consider the effects of the Route 40 project on archaeological and historic resources. DelDOT called on Skelly and Loy, Inc., to conduct cultural resources investigations, and this report documents the Phase I archaeological survey. A separate document (Kuncio and Hyland 2003) details the historic resource survey.

1.2 Report Format

The reporting requirements of Section 106 of the National Historic Preservation Act include the dissemination of survey results to sponsoring agencies and the State Historic Preservation Office. DelDOT has expressed a desire to streamline the format of survey reports, wherein



PROJECT LOCATION
Coochs Bridge
Iron Hill
Glasgow High Sch
Cedar Farms
Heather Woods
Salem Woods
Belltown Woods
Frasers Corner
Glasgow
Melody Meadows
Caravel Farms
Caravel Academy
Caravel East
Becks Pond
Mobile Home Park
Gaging Station
Substation
Bible Fellowship Ch
REYBOLD ROAD
OLD BALTIMORE PIKE
4 LANE
Pencader
LEVEE



U.S.G.S. QUAD. SHEET: NEWARK EAST AND ST. GEORGES, DEL.

DELAWARE DEPARTMENT OF TRANSPORTATION

ROUTE 40 IMPROVEMENTS
S.R. 896 TO S.R. 1
NEW CASTLE AND PENCADER HUNDREDS
NEW CASTLE COUNTY

PROJECT LOCATION

FIGURE - 1

SKELLY and LOY Inc.
CONSULTANTS IN
ENVIRONMENT - ENERGY
ENGINEERING - PLANNING

important information is presented and boilerplate sections are eliminated. Given the limited findings of the current project (i.e., one prehistoric isolate and two historic sites), an abbreviated format report was considered appropriate.

The present report foreshadows the types of data fields that might be included with a future GIS-based, fully electronic report. Ideally, each symbol on an electronic version of Figure 2 would be linked to a series of data sets. If an engineer or compliance officer was concerned with the area covered by Sheet 4, they would simply click on the Sheet 4 icon in the map directory. This would provide information on the previously recorded Keene School site and the area previously cleared for Section 106 compliance (Table 1), the four residences depicted on maps from 1849, 1868, and 1881 (Table 2), the survey methods by test area (Table 3), the results by test area (Table 4), and the management recommendation for all archaeological resources on Sheet 4 (Table 5). In an electronic version, an interested researcher could also click directly on a specific test area, an isolated find or site, a previously recorded site, or a cartographically indicated location of historic activity.

1.2.1 Research Design

This narrow, linear corridor study was undertaken to provide data to address generic research issues of prehistoric adaptation and settlement (essentially placing components on the landscape), historic settlement between rural hubs (Glasgow and Bear), and post-depositional processes. The Area of Potential Effect (APE) is generally rated low to moderate for prehistoric site potential by the Custer (1986) mapping, and only occasional, limited-activity use probably occurred during the prehistoric period. The historic maps indicated several loci of historic activity, but their survival in the heavily developed corridor was to be addressed.

1.2.2 Environmental Setting

The present report format does not include an environmental context for the study. Previous nearby studies and appropriate state contexts have provided reconstructions of past environments and present conditions in this section of the county (Brown *et al.* 1990; Catts and Custer 1990; Custer 1986; Custer and Cunningham 1986; Custer *et al.* 1986;